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ABSTRACT

Two groups of classroom teachers (N=36) and two groups of teacher trainees (N=36) were asked to complete behavior checklists for a hypothetical child labeled normal or emotionally disturbed and for a videotaped child labeled normal or emotionally disturbed. Analysis of results indicated that teachers and trainees held quantitatively similar stereotypes for normal and disturbed children but differed with respect to their susceptibility to label induced bias. Teachers tended to be more realistic in their evaluations of "normal," nonbiased behavior, but were influenced by the biasing label to a greater extent than the trainess. (Author/CL)

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Research Report No. 3

SUSCEPTIBILITY TO STEREOTYPIC BIAS

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I. Adequacy of Norm-Referenced Data for Prediction of Success

II. Computer Simulation Research on the Assessment/Decision-making/Intervention Process

III. Comparative Research on Children Labeled LD and Children Failing Academically but not Labeled LD

IV. Surveys on In-the-Field Assessment, Decision Making, and Intervention

V. Ethological Research on Placement Team Decision Making

VI. Bias Following Assessment

VII. Reliability and Validity of Formative Evaluation Procedures

VIII. Data-Utilization Systems in Instructional Programming

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Abstract

Two groups of classroom teachers and two groups of teacher trainees were asked to complete behavior checklists for a hypothetical child labeled normal or emotionally disturbed and for a videotaped child labeled normal or emotionally disturbed. It was concluded that teachers and trainers hold quantitatively similar stereotypes for normal and disturbed children but differ with respect to their susceptibility to label induced bias. Teachers tended to be more realistic in their evaluations of "normal," non-biased behavior, but were influenced by the biasing label to a greater extent than the trainees. Limitations of the study and implications for training programs are discussed.

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Susceptibility to Stereotypic Bias

Classroom teachers exert considerable influence upon the intellectual, academic, and social development of the children entrusted to their care. Differences in characteristics and behaviors of children have been shown to produce differential effects with regard to teachers' expectations and interactions. Brophy and Good (1974) suggested that susceptibility to "teacher-expectation effects" was an individual difference variable within teachers that required research. If the extent to which teachers may be biased by selected child characteristics could be predicted, Brophy and Good reasoned that more productive matching of children and teachers might be possible.

Interest in teacher expectancy effects has demonstrated that a number of biasing factors may affect teachers' ratings and interactions with children. Palardy (1969) demonstrated that teacher expectancies significantly affected child performances in academic areas. Rubovitz and Maehr (1973) investigated the negative attitudes which teacher trainees held toward minority group students. Ross (1974) has demonstrated that teachers hold less positive expectations for unattractive children and Algozzine (1976) showed that attractive children received more favorable classroom interactions from their teachers. A number of researchers (Foster, Ysseldyke, & Reese, 1975; Jones, 1970; Salvia, Clark, & Ysseldyke, 1973; Rosenthal & Jacobson, 1968) have shown that various labeling conditions may generate stereotypical expectancies on the part of teachers or teachers-in-training, and these expectancies

may influence in various ways the teachers' relationships with children.

While a variety of student characteristics have been shown to be influential within the teacher expectancy research, the actual mechanism through which these factors operate has remained somewhat elusive. Several models have been suggested in which a number of conditions must be met before a biasing factor actually influences the behavior of a child. Barber, Calverley, Forgione, McPeake, Chaves, and Bowen (1969) have delineated an eight step model describing the potential effects of teacher expectancy on child performance; the teacher must attend to, comprehend, and retain the expectancy; the teacher must transmit the expectancy to the child; the child must attend to, comprehend, retain and act upon the expectancy. Researchers have begun the task of investigating various components of the Barber et al. model to determine the effects of expectancy in the classroom setting.

Rubovitz and Maehr (1971, 1973) reported on an "interaction quality" hypothesis which deals with the subtle mechanism by which expectancies may be transferred from teacher to child. Foster and Ysseldyke (1976) demonstrated that classroom teachers attend to deviancy labels, associate negative expectancies with deviancy labels, and retain these negative expectancies even when confronted with behavior inconsistent with the label. Similar findings in other areas have been documented (Brophy & Good, 1974).

Regardless of the mechanism through which expectancies are influential, factors associated with different degrees of susceptibility

must be delimited. It seems a complex system of variables (e.g., individual teacher differences) influence the establishment of differential expectancy effects (Brophy & Good, 1974; Foster, 1976; Salvia et al., 1973). Despite the considerable expenditure of effort in delineating variables which may cause negative expectancies on the part of the classroom teacher, little empirical data are available which relate to the inter/intra-subject differences which cause one teacher to be influenced by a bias inducer while another remains objective.

Laboratory experiments not directly related to the educational milieu have suggested that the status difference between the agent and subject (Barber et al., 1969) and the sex of the agent (Rosenthal, 1964) may relate to the establishment of a bias effect. Within an educational framework, Schain (1972) suggested that the sophistication of the teacher population may influence the bias effect and Carter (1969) found that internal versus external locus of control influenced the way teachers-in-training reacted to a biasing influence. Curran (1976) showed that tolerance for behavior was influential in teachers' ratings of a hypothetical child; however, no formal research has been presented which investigated potential differences in susceptibility to the bias effect between experienced classroom teachers and teacher trainees without such experience. This study offers a preliminary investigation of these differences by examining the establishment and retention of negative stereotypes for experienced teachers and teachers-in-training. A comparison of these two groups was considered important in that a primary factor thought to differ-

entiate them was actual classroom experience with children. Two specific hypotheses were investigated in this study:

(1) When asked to rate the expected behaviors of a hypothetical child, experienced classroom teachers will not give ratings different from inexperienced teachers-in-training as a function of either of two label conditions.

(2) When asked to rate the expected behaviors of an actual child, experienced classroom teachers will not give ratings different from inexperienced teachers-in-training as a function of either of two label conditions.

The interactive aspect of these hypotheses represented a test of the differential susceptibility notion within the teacher expectancy research. The "experience" main effect tested a generalized susceptibility and the "label" main effect was a test of a partial replication of previous work.

General Overview

Thirty-six experienced classroom teachers were randomly assigned to one of two treatment conditions, designated as normal expectancy/teacher subject group and low expectancy/teacher subject group. Thirty-six graduate and undergraduate students enrolled in a beginning course on emotional disturbance were randomly assigned to one of two treatment conditions, designated as normal expectancy/trainee group and low expectancy/trainee group. The teacher and trainee normal

expectancy groups received identical treatments, as did the teacher and trainee low expectancy groups.

All treatment groups were told that they were participating in a reliability and validity study of a newly developed teacher referral instrument. Groups were segregated during the experiment and each participated in two phases of the study; Phase I being an expectancy condition and Phase II a halo effect condition. All participants were informed of the actual intent of the experiment subsequent to the data collection; in fact, little real deception was involved in the experiment.

During Phase I (expectancy phase), subjects were asked to complete one copy of the referral device. The normal expectancy groups were told to complete a behavior checklist as they thought appropriate for a normal fourth grade boy while the low expectancy groups were told to complete the checklist as appropriate for an emotionally disturbed fourth grade boy.

These forms were collected and Phase II (halo effect) began. During this phase the segregated groups were shown a videotaped presentation of a normal fourth grade male student engaging in various activities. The normal expectancy groups were told that the taped subject had been evaluated by a clinical team and designated normal, while the low expectancy groups were told the child had been labeled emotionally disturbed through this evaluation. All groups were exposed to identical taped presentations. Following the presentation, each group was asked to complete a second referral form based on the behaviors they had observed on tape, as if referring the

taped child for evaluation. The Phase II materials were then collected and the subjects were debriefed.

Procedure

Materials

Videotape. A twelve-minute color videotape of a fourth grade male child was developed for use in expectancy research (Foster et al., 1975). The child was chosen on the basis of normalcy in the areas of intelligence, academic achievement and appearance; normalcy of appearance was determined during a previous study employing a Q-sort technique (Salvia, Sheare, & Algozzine, 1975). The child's cumulative folder was examined and found to contain no records of unusual behavior.

The tape presented this child engaging in four different activities: (1) taking the Wide Range Achievement Test reading recognition subtest, (2) taking the Peabody Individual Achievement Test (PIAT) general information subtest, (3) engaging in various perceptual/motor tasks, and (4) engaging in a brief free play period. The child recognized words (WRAT) at grade level. Although the subjects who viewed the tape were not told that the child performed at grade level, they were supplied with a list of words that the child was being required to read. PIAT performance was also at grade level.

Dependent Measure. The referral instrument consisted of a 23-item checklist on which subjects could rate the child in various areas including academic skills, developmental level, activity level and personal/social adjustment. Ratings were made along a 106 milli-

meter continuum divided into five levels ranging from "superior" to "far below average." Distance along this line constituted the score for each item; the average distance for all items represented the score for the dependent measure. High scores were indicative of negative ratings and the midpoint of the range (i.e., 53) was considered "average."

Subjects

Two groups of subtests were involved in this investigation: experienced classroom teachers and teachers-in-training. The former group consisted of thirty-six elementary grade classroom teachers employed through an urban central Pennsylvania school district. The average amount of teaching experience for this group was 9.6 years, average age was 32.5 years. The sample consisted of nine males and twenty-seven females, with an average educational attainment between a bachelor's and master's level. All teachers were certified in elementary education.

The teachers-in-training consisted of thirty-six students majoring in a teacher preparation program in special education and enrolled in a first term graduate course studying emotional disturbance in children. Six of the teachers-in-training were male while thirty were female; the average age of the sample was 25.9 years. The group participated in this study during the first week of classes so as to minimize their objective knowledge of emotionally disturbed children. At the time of the study, the career goals of these subjects included "obtaining a teaching position upon graduation."

Results

The means, standard deviations and analysis of variance summary table for the expectancy (i.e., Phase I) condition are presented in Table 1. A significant main effect for the label factor is indicated.

Insert Table 1 about here

Children labeled emotionally disturbed were rated significantly higher than those labeled normal; that is, students and teachers rated the "disturbed child" more negatively than the "normal" one. The a priori interaction hypothesis was analyzed using a complex contrast (Games, 1971). These results were similar to those of the overall F test; no differences were indicated between students' and teachers' ratings of the "normal" or "emotionally disturbed" label.

The means, standard deviations, and analysis of variance summary table for the halo effect (i.e., Phase II) condition are presented in Table 2. Significant main effects for the experience and label factors

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Insert Table 2 about here

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are indicated. The "disturbed" child was again rated more negatively than the "normal" one and the ratings of students were significantly lower (i.e., more positive) than those of teachers during this phase of the experiment. The analysis of the complex contrast indicated that students and teachers rated the normal child more positively and the differences between the students and teachers were significant for each label; these results were somewhat different than those of the overall analysis of variance.

Discussion

During Phase I, expectancy phase, teachers and teachers-in-training rated a hypothetical emotionally disturbed child more negatively than they did a hypothetical normal child. These results are consistent with those reported earlier (Foster & Ysseldyke, 1976; Foster, Ysseldyke, & Reese, 1975). Hypothesis one (at the interaction level) could not be rejected, and the similar mean ratings for the teacher and teacher-in-training groups under both labeling conditions showed that their expectations for the hypothetical children were at least quantitatively similar. When rating a hypothetical normal child, both groups gave mean ratings considerably below the midpoint of the rating continuum (corresponding to an average rating of 53 and designated as average). Both groups expected the "normal" child to be above average. Similarly, they expected the "disturbed" child to be below average.

During Phase II (halo effect phase) the subjects were to rate an actual child's behavior. Again the emotionally disturbed label conditions consistently generated more negative ratings than did the normal label conditions. Differences were also noted under actual observation conditions between the ratings of experienced teachers and inexperienced teachers-in-training. Under the normal label conditions, teachers-in-training gave more positive ratings than did teachers. Teacher ratings, under these experimental conditions, placed the observed child at the midpoint of the rating continuum, designated as average. This shows the realistic nature of the teacher ratings, since the behaviors demonstrated on the videotape were chosen to be

typical of a child functioning at the 50th percentile in a number of areas. The more positive teacher-in-training ratings were less realistic and tended to give the videotaped child credit for being somewhat above average.

During Phase II the groups also differed under emotionally disturbed label conditions, with teachers giving more negative ratings than teachers-in-training. These data relate to the ability of the two groups to avoid giving ratings influenced by a halo effect. The noted differences suggest that the teachers-in-training were less influenced by the biasing label than were the classroom teachers, although both groups were affected.

It appears that rating differences do exist between the two groups. Teachers were more able to objectively rate the behaviors of a child labeled normal, but were less able to overcome the stigmatizing effects of an emotionally disturbed label.

Perhaps the experience of the classroom teachers had given them a sound background in the rating of "average" behaviors, but this background seemed readily set aside when a deviancy label was introduced. Teachers-in-training, on the other hand, were less able to compare behavior against a background of "average" performances, but were less susceptible to bias when exposed to a child labeled deviant.

The teachers-in-training had previously been exposed to the bias phenomenon as represented by the work of Jones (1972) and Rosenthal and Jacobson (1966, 1968). This experience may have been responsible for the halo effect differences noted between the groups. Since the

trainees were still influenced by the deviancy label it may be assumed that this exposure was not entirely effective as a training technique. It is suggested that the methodology employed in this study could be used in training programs to explicitly demonstrate to trainees the operation of the bias phenomenon. Individualized feedback could demonstrate to each trainee his or her susceptibility to the effects of stereotyping; such a technique would likely be more effective than mere exposure to the thoughts and research of others.

The differences in level of teaching experience and type of training between the two groups of subjects may also have been responsible for the results obtained. Other differences, however, existed between the groups and could confound this conclusion. Age differences were present and may have had an influence, aside from related experiential level. The teachers-in-training were interviewed in a university setting, where demand characteristics are high (Orne, 1962) and these demands may have confounded the data. Finally, no attempt was made to differentiate between the effects of experience and training.

In general, the results of this study suggest that two groups of subjects differed in their analysis of the actual behavior of a labeled child. The exact nature of the organismic differences between the teachers and teachers-in-training remains undefined; however, continued research in this area seems warranted. The practical value of subsequent research will depend upon the extent to which predictable (perhaps controllable) differences can be identified so that the negative aspects of expectancy biasing can be reduced.

It is somewhat obvious, however, that inter/intra-personal variables do influence the bias effect and that research methodology in

this area has progressed to the point where these differences may be evaluated. Further research in areas relating to teacher training differences will make possible the design of training programs which will lessen the effects of label-induced bias as it now operates in the schools. Equally, knowledge of the susceptibility of particular teachers to negative expectancy effects may enable school psychologists and/or others involved in placement decisions to maximize the likelihood that a child will not be discriminated against due to educationally irrelevant characteristics (i.e., biasing factors).

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Footnotes

Bob Algozzine and James Ysseldyke are affiliated with the University of Minnesota Institute for Research on Learning Disabilities.

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Table 1

Means, Standard Deviations, and Analysis of Variance for Phase I Conditions[a]

Experience	Label: Normal	Label: Emotionally Disturbed
Students	$\bar{X}$ = 43.17	$\bar{X}$ = 71.00
	s = 11.27	s = 9.49
Teachers	$\bar{X}$ = 47.20	$\bar{X}$ = 70.61
	s = 8.39	s = 8.39

Source	MS	df	F
Between Subjects			
Experience	60.50	1	.68
Label	11806.72	1	131.92[b]
Experience X Label	88.89	1	.99
Error	89.50	68	

[a]High scores reflect negative ratings.

[b]$p < .05$

Table 2

Means, Standard Deviations, and Analysis of Variance

for Phase II Conditions[a]

Experience	Label: Normal	Label: Emotionally Disturbed
Students	$\bar{X}$ = 45.39	$\bar{X}$ = 61.28
	s = 9.26	s = 9.74
Teachers	$\bar{X}$ = 52.61	$\bar{X}$ = 64.22
	s = 11.69	s = 8.08

Source	MS	df	F
Between Subjects			
Experience	465.13	1	4.86[b]
Label	3403.13	1	35.56[b]
Experience X Label	82.35	1	.86
Error	95.70	68	

[a]High scores reflect negative ratings.

[b]$p < .05$

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* As part of its continuation proposal, the Institute was required to prepare these monographs. Because they are part of the proposal, they are not available for general distribution.